Frequency Offset Estimation for Communication Systems Method and Device for Inter Symbol Interference

Abstract

5   A frequency offset estimation based on state-based differential accumulation and the device thereof are disclosed. The concept of the sate-based operation is introduced by mathematical derivations. The knowledge of received data symbols and timing is utilized. Then the detailed operations are also given by both equations and conceptual descriptions. It is unnecessary to estimate the channel

10   jointly or concurrently, while the differential operation over the received samples of the same state is performed. Such operation is obviously much simpler and easier to implement in VLSI than all the other techniques.

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